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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/572,867	03/21/2006	John F. Rabolt	UOD-215US	3642	
66469 RATNERPRES	7590 06/10/201  TIA	1	EXAMINER		
P.O. BOX 1596			TENTONI, LEO B		
WILMINGTON, DE 19899			ART UNIT	PAPER NUMBER	
			1742		
			MAIL DATE	DELIVERY MODE	
			06/10/2011	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/572,867	RABOLT ET AL.	
Office Action Summary	Examiner	Art Unit	
	LEO B. TENTONI	1742	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	ith the correspondence addres	ss
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory peric  - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MOI tute, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this commu BANDONED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 27 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ TI 3) ☐ Since this application is in condition for allow closed in accordance with the practice unde	his action is non-final. vance except for formal mat	·	erits is
Disposition of Claims			
4) ☐ Claim(s) 1 and 6-21 is/are pending in the ap 4a) Of the above claim(s) 15-21 is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 and 6-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction.  11) The oath or declaration is objected to by the	ccepted or b) objected to ne drawing(s) be held in abeya ection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1	` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for forei  a) All b) Some * c) None of:  1. Certified copies of the priority docume  2. Certified copies of the priority docume  3. Copies of the certified copies of the priority docume  application from the International Bure  * See the attached detailed Office action for a li	ents have been received. ents have been received in A riority documents have beer eau (PCT Rule 17.2(a)).	Application No n received in this National Stag	ge
Attachment(s)  1) Notice of References Cited (PTO-892)		Summary (PTO-413)	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>05052011;06012011</u>.</li> </ol>		(s)/Mail Date Informal Patent Application 	

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### DETAILED ACTION

# Election/Restrictions

1. Claims 15-21 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 30 October 2009.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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- 4. Claims 1, 6-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foulkes (U.S. Patent Application Publication 2006/0036318 A1) in combination with Senecal et al (U.S. Patent Application Publication 2001/0045547 A1) for the reasons of record.
- 5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foulkes (U.S. Patent Application Publication 2006/0036318 A1) in combination with Senecal et al (U.S. Patent Application Publication 2001/0045547 A1) as applied to claims 1, 6-10 and 12-14 above, and further in view of Balkus, Jr. et al (U.S. Patent Application Publication 2003/0168756 A1) for the reasons of record.

# Response to Arguments

- 6. Applicant's arguments filed on 27 April 2011 have been fully considered but they are not persuasive.
- 7. Applicant argues (pages 5-7) that Foulkes does not teach (1) mixing a dye capable of reversibly changing color and a polymer, (2) mixing . . . at a temperature below the temperature at which the dye or polymer degrades, or (3) wherein the dye penetrates more than the surface of the dyed fiber and is distributed uniformly throughout the dyed fiber (emphasis by applicant).

  Regarding (1), Foulkes teaches that polymer fiber material, including photochromic material therein, is electrospun (see paragraphs [0028] and [0040] of Foulkes). For electrospinning, polymer and any other desired material (e.g., photochromic material) are mixed together and forced through openings in a

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spinneret under the influence of an electric field to form fibers. See also paragraphs [0010] and [0020] - [0023] of Senecal et al wherein the electrospun material is in the form of a solution. Regarding (2), both Foulkes and Senecal et al are directed to the manufacture of dyed fibers and one of ordinary skill in the art at the time the invention was made would be motivated to use a temperature (or a range of temperatures) which is(are) lower than the dye degradation temperature or the polymer degradation temperature because too high a temperature will result in the manufacture of poor-quality fibers. Regarding (3), Foulkes and Senecal et al do not explicitly teach that the fibers have any non-uniform characteristics and so one of ordinary skill in the art at the time the invention was made would have a reasonable expectation that the fibers manufactured by the combination of Foulkes and Senecal et al would have a uniform distribution of dye in the fibers.

8. Applicant argues (pages 6 and 7) that the term "impregnated with" in Foulkes would be understood by one of ordinary skill in the art at the time the invention was made to mean that already-formed fibers should be somehow treated to impregnate the fibers with the opacifying material, and that this does not suggest mixing or a mixture. Examiner responds that Foulkes is not limited to just impregnating fibers with a dye. Foulkes teaches that polymer fiber material and any other desired material (e.g., photochromic material) is electrospun (see paragraphs [0028] and [0040] of Foulkes), which means that the polymer fiber material

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and any other desired material are mixed together prior to the electrospinning process. See also paragraphs [0010] and [0020] - [0023] of Senecal et al wherein the electrospun material is in the form of a solution.

#### Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in  $37\ \text{CFR}\ 1.136(a)$ .

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEO B. TENTONI whose telephone number is (571)272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LEO B TENTONI/
Primary Examiner, Art Unit 1742